DOCUMENT RESUME

ED 214 270 EA 014 522

AUTHOR Scarr, L. E.; And Others
TITLE Educating Students Today for a Place in Society Tomorrow: The Lake Washington School District Futures Study. A Research Report.
INSTITUTION Lake Washington School District 414, Kirkland, Wash.
PUB DATE 30 Dec 80
NOTE 78p.; For a related document, see EA 014 523. Some charts contain small print.

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Community Attitudes; Educational Change; *Educational Trends; Elementary Secondary Education; *Futures (of Society); Long Range Planning; Needs Assessment; Questionnaires; School Surveys; Social Change; *Student Attitudes; *Teacher Attitudes
IDENTIFIERS *Lake Washington School District WA

ABSTRACT

During the last few months of 1980 the Lake Washington School District in Kirkland, Washington, conducted a futures study as part of an overall needs assessment study. The study staff identified over a hundred social, political, or economic changes predicted to affect life in the United States in the 1980s. Of these, 37 items were selected for a questionnaire which was eventually completed by 446 community members, 438 staff members, and 417 students in the district. Respondents were asked how likely they thought each predicted change was and to what extent they thought each change would affect the schools. Questionnaire responses indicated a belief that new information, changes in technology, and demands for vocational and adult education would all increase rapidly, and that education would be made available to persons at all stages of life. The study led to recommendations that the district pursue long-range planning on a continuous basis. Appendices include the questionnaire employed, an analysis of the responses to each question, and a manual for administration of the needs assessment study. (Author/PGD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Robert A. Lehman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED214270

EDUCATING STUDENTS TODAY FOR A PLACE IN SOCIETY TOMORROW: THE LAKE WASHINGTON SCHOOL DISTRICT FUTURES STUDY

A Research Report Submitted to:

Lake Washington School District #414

Kirkland, Washington 98033

(*Study Team: L.E. Scarr, District Superintendent; J.L. Hager, Deputy Superintendent; R.A. Lehman, Director Planning and Evaluation; and R.F. Latta, Consultant and Director of the Center for Educational Management, San Diego State University, San Diego, California*)

December 30, 1980

EA 014 522

TABLE OF CONTENTS

		Page
LIST OF TABLES		ii
I.	INTRODUCTION	1
II.	PROCEDURES	4
III.	RESULTS	7
IV.	ANALYSIS OF FINDINGS	14
V.	SUMMARY AND RECOMMENDATIONS	20
APPENDIX A:	P.E.R.T. CHART SHOWING THE SCHEDULE OF ACTIVITIES FOR THE 1980 COMPREHENSIVE NEEDS ASSESSMENT.	23
APPENDIX B:	ADMINISTRATOR'S MANUAL, FOR CONDUCTING THE LAKE WASHINGTON SCHOOL DISTRICT COMPREHENSIVE NEEDS ASSESSMENT STUDY	25
APPENDIX C:	THE LAKE WASHINGTON SCHOOL DISTRICT FUTURES QUESTIONNAIRE	35
APPENDIX D:	SUMMARY OF THE EFFECT, THAT EACH FUTURE WOULD HAVE ON EDUCATION IN THE DISTRICT WERE IT TO ACTUALLY OCCUR.	40
APPENDIX E.	DISTRICT AND POPULATION FREQUENCY DISTRIBUTION FOR EACH FUTURES ITEM.	51
APPENDIX F.	MODEL FOR REALIZING DESIRED PROBABLE FUTURES: ILLUSTRATED WITH CATEGORY D FUTURES	60

LIST OF TABLES

	Description	Page
I.	Components to be Included in the Lake Washington School District 1980 Needs Assessment Study with Supporting Rationale	1
II.	Selection Strategy Schedule and Participation Targets for Populations to be Surveyed in "The Futures Study during the 1980 Needs Assessment".	5
III.	The Number and Percent Return, by Population, of Usable Futures Questionnaires	7
IV.	District Overall Summary and Summary Responses By Populations Surveyed for Each Futures Item	8
V.	Futures Items In Order of Impact On Education (High to Low) in Lake Washington School District as Measured by Community	16
VI.	The Sixteen High Impact Futures Separated Into Four Categories	19
VII.	District and Population Frequency Distribution for Each Futures Item.	52

I. INTRODUCTION

During the early Spring of 1980, Lake Washington School District began planning for its second comprehensive Needs Assessment.[1] One of the first decisions which the district faced was to decide upon the components/areas to be assessed (See Table I, below, for both those areas to be assessed and the rationale for inclusion in the study). The next question to be addressed was the activities that need to take place as well as when and how they would take place.

Table I: Components to be Included in the Lake Washington School District 1980 Needs Assessment Study with Supporting Rationale.

Component	Rationale
1. Evaluation of Educational Programs, 1977-1980.	The district had established 18 high priority needs in 1977 and now (Fall, 1980) needed to examine/assess the progress made towards resolving each of the 1977 needs.
2. District and School Climate.	Results of the 1977 needs assessment showed that the district's climate was Low. As the district had attempted, through several thrusts, to improve its climate, it was now time to assess progress made in this area.
3. Testing Items for Consideration.	There was a need to "test" or gauge community support/reaction towards some actions/programs which the district either had been, or might have to consider in the not too distant future.

[1] The district's long range planning progress includes, among many other things, a comprehensive needs assessment study every three years. As the last one was undertaken in Fall of 1977, the next one is scheduled for Fall of 1980.

4. Vocational-Technical Education.	The district is in the process of strengthening its Vocational-Technical Education programs. Results from a survey using carefully constructed questions would be useful in this behalf.
5. Futures.	As the district is committed to educating children for their world, which may not be exactly like ours at this moment in time, information regarding what the future might entail would be beneficial to the district.

September 15, 1980, was set as the date for community assessment. Input from administrators, staff and students would be secured during the period of September 15 through September 26, 1980. Results from the "futures" phase of the districts' needs assessment study (Phase V, see Figure I below) would be considered along with both the results from the other four phases of the study and other school objective-based data.[1]

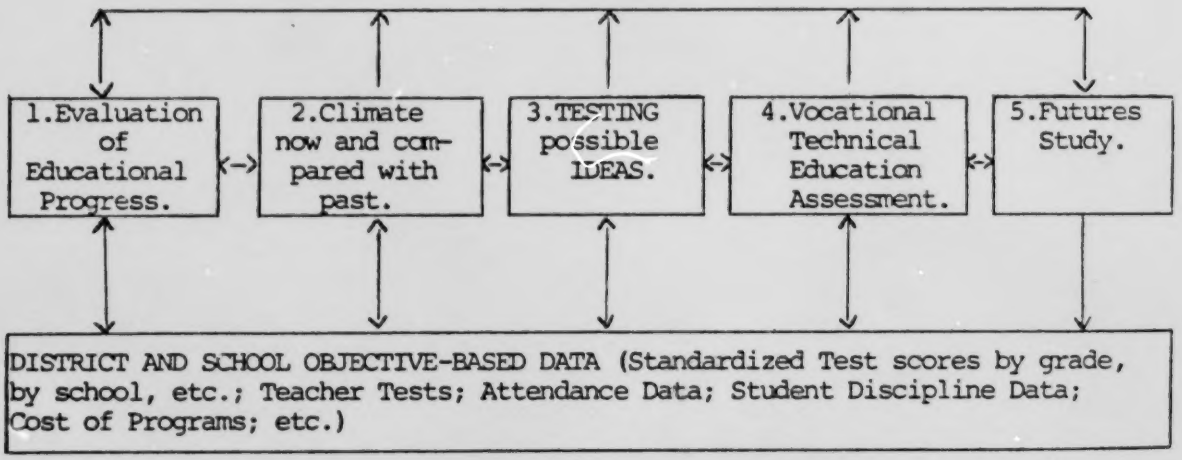

1.Evaluation of Educational Progress.
2.Climate now and compared with past.
3.TESTING possible IDEAS.
4.Vocational Technical Education Assessment.
5.Futures Study.
DISTRICT AND SCHOOL OBJECTIVE-BASED DATA (Standardized Test scores by grade, by school, etc.; Teacher Tests; Attendance Data; Student Discipline Data; Cost of Programs; etc.)

FIGURE I: Major components in the Lake Washington School District, 1980. Comprehensive Needs Assessment Study.

[1]Individuals interested in the procedures and/or results of other phases of the needs assessment study should contact the district directly.

Ideally, the results from this component of the district's comprehensive needs assessment study should suggest some things that the district might aim towards within the next 5 to 10 years.

This report pertains only to the activities and findings of the "Future Study", the fifth component in The Lake Washington School District 1980 Comprehensive Needs Assessment Study.

II. PROCEDURES

As mentioned briefly in the introduction, planning for the district's forthcoming comprehensive needs assessment study began in early Spring 1980. One of the first tasks of the planning group was to design a P.E.R.T. chart showing the schedule and sequence of activities to be undertaken (See Appendix A, page 23, for chart). Responsibilities were then delegated (See Appendix B, page 25, for the management responsibility guide for the needs assessment) and work got underway. The following is a brief outline of the procedures followed in planning and implementing this phase of the district's needs assessment:

1. Populations to be involved in the futures study were established along with strategies to ensure maximum participation (See Table II page 5).
2. Books and research reports regarding the future were identified and analyzed with the intent of selecting out predicted futures which might become part of a questionnaire.
3. One hundred and four (104) predicted futures were identified and analyzed by the district's needs assessment planning team. Thirty-seven (37) of the one hundred and four (104) futures items were selected for use in the district's future study (See Appendix C, page 35, for the resultant futures questionnaires).

Table II: Selection Strategy, Schedule and Participation Targets for Populations to be surveyed in the "Futures Study" during the 1980 Needs Assessment.

Population	Selection Strategy	Assessment Schedule	Participation Target / Return Rate Expected
Community Members	Have building principals contact and invite all community members within their schools service area.	September 15, 1980, at each school site.	2,000 / 30%=600 questionaires returned
Staff	Have building principals administer questionnaire during building staff meetings.	September 15 - 26, 1980.	700 / 60%=420 questionnaires returned
Students	Have building principals administer to selected "in-tact" classes.	September 15 - 26, 1980.	700 / 60%=420 questionnaires returned
Selected Experts or people and/or people in a position to influence the future: futures experts and politicians.	Mail directly to features experts and politicians.	October through December 1980.	40 / 50%=20 questionnaires returned

4. 4000 copies of the futures questionnaire were made and appropriate numbers delivered to each school site for use during September 15-26, 1980.
5. On the evening of September 15, 1980, community members in attendance at the needs assessment sessions at each school site were given a copy of the "Futures Questionnaire" as they left. They were asked to complete the questionnaire at their earliest convenience and return it to the district once completed.
6. Completed instruments were checked and forwarded for analysis.
7. Upon receipt of the instruments, October 24, 1980, the data was coded for keypunching and keypunched.
8. The results were analyzed and summarized.
9. The preliminary results were returned to the district on November 17, 1980.
10. The final report was drafted and presented to the district on December 30, 1980.

III. RESULTS

In total, 1701 usable questionnaires were returned and used for analysis (Table III, below, shows the breakdown of usable returns along with the percentage of returns). Table IV, pages 8-13, contains both the overall district summary and summary responses by populations surveyed for each "Futures" item. Appendix D, pages 40-50, contains a summary (as perceived by the 1701 respondents) of the effect that each future would have on education in the district were it to actually occur. Appendix E, pages 51-59, contains the district and population frequency distributions for each futures item.

Table III. The Number and Percent Return, by Population, of Usable Futures Questionnaires.

Population	Number Receiving Questionnaires	Number Returning Usable Questionnaires	Actual % Return / Expected % Return
Community Members	1753	446	25% / 30%
Staff	771	438	57% / 60%
Students	734	417	57% / 60%
Futures Experts and/or Politicians	40	To Be Completed Later in January 1981	To Be Completed Later in January 1981
Total Number of Usable Questionnaires Returned		1701	

Table IV: District Overall Summary and Summary Responses by Populations Surveyed for Each Futures Item.

District and Population Means

0 = No chance of occurrence
5 = High Likelihood

0 = Absolutely No impact
5 = High impact

FUTURES ITEMS		District Mean	Community	Staff	Students
1. World resources, behavior & opinion will have more influence on life in the U.S.	Likeli of occur.	4.21	4.38	4.30	3.91
	Impact on Educ.	3.57	3.59	3.78	3.33
2. Underdeveloped countries will control their natural resources.	Likeli of occur.	2.84	3.00	2.94	2.54
	Impact on Educ.	2.28	2.48	2.56	1.76
3. There will be world-wide recognition of the dangers of population growth & pollution of the biosphere.	Likeli of occur.	3.60	3.65	3.49	3.66
	Impact on Educ.	3.29	3.16	3.30	3.43
4. The population will include a smaller percentage of children & a larger percentage of senior citizens.	Likeli of occur.	3.60	4.02	4.06	2.64
	Impact on Educ.	3.62	3.74	3.97	3.07
5. People will be more alike with fewer cultural & geographic differences & less class distinction.	Likeli of occur.	2.29	2.22	2.31	2.35
	Impact on Educ.	2.44	2.21	2.54	2.60
6. Residential & work places will be located in closer together to reduce transportation-related problems.	Likeli of occur.	3.22	3.11	3.23	3.33
	Impact on Educ.	2.85	2.73	3.05	2.77

Table IV - Cont'd.

FUTURES ITEMS		District Mean	Community	Staff	Students
7. It will be national policy to provide meaningful employment to all who wish to work.	Likeli of occur.	2.46	2.33	2.41	2.65
	Impact on Educ.	2.58	2.40	2.62	2.74
8. New national programs will have been created by the federal government for planning & regulation of health, social welfare, & education.	Likeli of occur.	3.45	3.41	3.52	3.41
	Impact on Educ.	3.42	3.43	3.50	3.30
9. Political & social pressure to improve the lives of senior citizens will have increased.	Likeli of occur.	3.75	3.94	3.91	3.33
	Impact on Educ.	2.48	2.66	2.78	1.86
10. New information will be continuing to increase at an extraordinary rate.	Likeli of occur.	4.16	4.38	4.31	3.70
	Impact on Educ.	3.99	4.15	4.11	3.66
11. Through developments in television, a large number of different channels will be received on home sets for purposes such as education, shopping & community news.	Likeli of occur.	3.89	4.01	3.98	3.64
	Impact on Educ.	3.69	3.70	3.72	3.63
12. Operation round the clock, seven days a week, will be more common in manufacturing, retail, & service industries.	Likeli of occur.	2.65	2.58	2.77	2.58
	Impact on Educ.	2.35	2.23	2.53	2.27
13. Shortages of various inputs (e.g., energy material resources) will appear, often with little advance notice.	Likeli of occur.	3.72	3.75	3.84	3.53
	Impact on Educ.	3.53	3.46	3.69	3.41

Table IV - Cont'd.

FUTURES ITEMS		District Mean	Community	Staff	Students
14. A higher proportion of the total labor force will be employed in pollution control & environmental protection activities.	Likeli of occur.	3.34	3.25	3.36	3.43
	Impact on Educ.	3.82	2.71	2.10	2.75
15. A smaller proportion of the work force will be needed in goods-producing industries, while a larger proportion will be needed in the service industries.	Likeli of occur.	3.19	3.29	3.29	2.94
	Impact on Educ.	2.85	2.90	3.09	2.50
16. There will be more jobs for technicians than there are today.	Likeli of occur.	3.78	3.92	3.76	3.61
	Impact on Educ.	3.47	3.69	3.60	3.03
17. More job descriptions will require people with human skills, i.e., openness, compassion, warmth, & tolerance.	Likeli of occur.	3.13	3.15	3.34	2.86
	Impact on Educ.	3.05	3.00	3.41	2.66
18. Certification by demonstration of skills rather than by diploma, degree, or completion of prescribed training sequences will be in wide use & generally accepted in education, professional, & business practice.	Likeli of occur.	2.93	2.86	3.02	2.90
	Impact on Educ.	3.27	3.18	3.40	3.20
19. A shorter work week and more leisure will be the rule for most workers.	Likeli of occur.	3.26	3.49	3.59	2.56
	Impact on Educ.	3.05	3.11	3.37	2.61

Table IV - Cont'd.

FUTURES ITEMS		District Mean	Community	Staff	Students
20. Compulsory retirement at a set age will be enforced regardless of health, ability or desire of the worker.	Likeli of occur.	2.25	1.99	2.25	2.61
	Impact on Educ.	2.04	1.84	2.24	2.05
21. People will need to be more self-motivated & self-directed than they are presently.	Likeli of occur.	2.37	3.41	3.32	3.38
	Impact on Educ.	3.32	3.40	3.41	3.10
22. Sexual relationships of varied types will be openly accepted.	Likeli of occur.	3.27	3.11	3.44	3.27
	Impact on Educ.	2.90	2.80	3.06	2.83
23. Child-care centers will be much more numerous than at present & will provide developmental & educational components for children.	Likeli of occur.	3.89	3.96	4.05	3.60
	Impact on Educ.	3.68	3.73	3.90	3.32
24. Many couples will divide bread-winning, household, & child-care duties on grounds other than sex.	Likeli of occur.	3.92	3.95	4.13	3.62
	Impact on Educ.	3.16	3.20	3.50	2.67
25. It will be possible to achieve chemical control of many undesirable negative, primitive, & aggressive behavioral tendencies in man.	Likeli of occur.	2.77	2.68	2.85	2.80
	Impact on Educ.	2.55	2.40	2.70	2.56

Table IV - Cont'd.

FUTURES ITEMS		District Mean	Community	Staff	Students
26. There will be schools of many sorts with widely varying methods & organizational styles. Public schools will offer choices & students will be free to select the program & style of instruction they prefer.	Likeli of occur.	3.11	3.06	3.01	3.32
	Impact on Educ.	3.62	3.63	3.50	3.77
27. Modes of teaching & learning will be more flexible utilizing computer-assisted multisensory & yet-to-developed forms of instruction.	Likeli of occur.	3.64	3.81	3.54	3.51
	Impact on Educ.	3.85	4.09	3.77	3.61
28. Futuristic studies will be part of the curriculum.	Likeli of occur.	3.33	3.33	3.35	3.31
	Impact on Educ.	3.38	3.37	3.42	3.34
29. Career education & work experience will be available for all students at some time during their public school experience.	Likeli of occur.	3.92	3.93	4.05	3.74
	Impact on Educ.	3.98	4.00	4.09	3.78
30. Computer simulation, games, etc. will permit the students to practice career & management activities, in order to help them choose their adult role.	Likeli of occur.	3.58	3.63	3.54	3.57
	Impact on Educ.	3.64	3.68	3.61	3.64
31. Institutions will provide continuing education throughout life to meet changing personal & occupational needs.	Likeli of occur.	3.89	4.06	4.01	3.45
	Impact on Educ.	3.75	3.90	3.90	3.32

Table IV - Cont'd.

FUTURES ITEMS		District Mean	Community	Staff	Students
32. Rapid changes in technology will cause many people to frequently retrain & change occupations.	Likeli of occur.	3.58	3.60	3.81	3.18
	Impact on Educ.	3.50	3.51	3.74	3.15
33. Early childhood education will be provided by the public schools for most children beginning at age 3 or 4, (school, day-care, or other).	Likeli of occur.	3.24	3.13	3.23	3.40
	Impact on Educ.	3.47	3.43	3.47	3.55
34. The school curriculum will include instruction in skills for coping with a complex society.	Likeli of occur.	3.57	3.63	3.65	3.37
	Impact on Educ.	3.62	3.62	3.81	3.35
35. Ability to read will be less important as a tool for gaining information.	Likeli of occur.	1.64	1.29	1.79	1.95
	Impact on Educ.	2.76	2.64	2.73	2.96
36. Education in languages, world trade, & world history will be in more demand by students.	Likeli of occur.	3.47	3.63	3.31	3.48
	Impact on Educ.	3.62	3.69	3.51	3.64
37. Learning opportunities for students will be provided throughout the community by business & social agencies, with the school serving to structure & coordinate the students' education.	Likeli of occur.	3.25	3.20	3.19	3.41
	Impact on Educ.	3.45	3.42	3.47	3.47

IV. ANALYSIS OF FINDINGS

In order to more closely examine the more critical futures items, the thirty-seven (37) items listed on Table IV, pages 8-13, were separated using the district mean ($\bar{X}$), impact on education as the separation variable, and a cut-off mean of 3.46. The results of this analysis produced sixteen (16) futures items for further indepth analysis (see Table V for the results of this analysis).[1] The remaining twenty-one futures items were not analyzed further in this study.

Examination of Table V, pages 16-18, finds a great deal of agreement between the responses of community and staff on both "the likelihood of occurrence" and probable impact on education except, perhaps, on items #3 and #14. Student perception of probable impact, however, differs significantly from that of the community and staff on seven (7) of the sixteen (16) futures items being more closely examined (see student ($\bar{X}$), impact on education, for questions number: 1, 4, 6, 9, 10, 14, and 16).

Setting the differences aside, as there is considerably more agreement among the populations surveyed than disagreement, several of the sixteen (high likelihood of occurrence - high impact on education: Table V) futures items are rather similar in nature. For example, several of the items speak of technology; ie, items 1,

[1] Population variance (concensus/agreement) is easily determined by examining the frequency distribution contained in Table VII, Appendix E, pages 52-59.

3, 4, 5, 7, 8, 9, 11 and 14. Further analysis (looking for futures items which suggested similar futures scenarios) found that the sixteen futures items fit rather well into four categories:

(A) Technology and Information.

(B) Resources.

(C) Socioeconomic and Employment Factors.

(D) Socio-Demographic Factors.

Table VI, page 19, contains the results of this analysis.

A further analysis of futures items (both "between" and "within" the four futures categories in Table VI, page 18) finds the four most common agreed upon futures to be:

1. New information will continue to increase at an extraordinary rate (items: 1, 11, 12, 13).
2. Technology will continue to develop at a rapid rate and will play both a larger and more important role in our lives (items 3, 5, 7, 14).
3. Education, either on a mandatory or voluntary basis, will be available for members of society from birth to death (items 4, 6, 10, 14).
4. The need for and interest in both vocational - technical and adult education will increase at a much more rapid rate (items 4, 10, 14).

Table V: Futures Items in Order of Impact on Education (High to Low) in Lake Washington School District.

FUTURES ITEMS		District Mean	Community	Staff	Students
1. New information continuing to increase at an extraordinary rate. [10, A][1]	Likeli of occur.	4.156	4.382	4.307	3.704
	Impact on Educ.	3.989	4.146	4.108	3.657
2. Career education and work experience will be available for all students at some time during their public school experience. [29, C]	Likeli of occur.	3.924	3.926	4.053	3.738
	Impact on Educ.	3.976	3.998	4.090	3.784
3. Modes of teaching & learning will be more flexible utilizing computer-assisted multisensory and yet-to-be-developed forms of instruction. [27, A]	Likeli of occur.	3.637	3.814	3.544	3.507
	Impact of Educ.	3.851	4.086	3.771	3.612
4. Institutions will provide continuing education throughout life to meet changing personal and occupa- needs. [31, A]	Likeli of occur.	3.887	4.056	4.007	3.542
	Impact of Educ.	3.753	3.898	3.901	3.321
5. Through developments in television, a large number of different channels will be received on home sets for purposes such as education, shopping & community news. [11, A]	Likeli of occur.	3.887	4.005	3.977	3.643
	Impact of Educ.	3.685	3.702	3.716	3.628

[1]Code = Number references back to original questionnaire and the letter refers to the category in which the item was placed in Table IV, page 8.

Table V - Cont'd.

FUTURES ITEMS		District Mean	Community	Staff	Students
6. Child-care centers will be more numerous than at present & will provide developmental & educational components for children. [23, D]	Likeli of occur	3.894	3.963	4.054	3.595
	Impact on Educ.	3.675	3.731	3.902	3.320
7. Computer simulation, games, etc. will permit the students to practice career & management activities, in order to help them choose their adult role. [30, A]	Likeli of occur.	3.579	3.626	3.538	3.567
	Impact on Educ.	3.644	3.682	3.606	3.642
8. There will be schools of many sorts with widely varying methods & organizational styles. Public schools will offer choices & students will be free to select the program & style of instruction they prefer. [26, A]	Likeli of occur.	3.111	3.063	3.007	3.315
	Impact on Educ.	3.622	3.630	3.501	3.765
9. The school curriculum will include instruction in skills for coping with a complex society. [34, A]	Likeli of occur.	3.574	3.633	3.651	3.369
	Impact on Educ.	3.620	3.620	3.808	3.353
10. The population will include a smaller percentage of children and a larger percentage of senior citizens. [4, D]	Likeli of occur.	3.604	4.016	4.060	2.639
	Impact on Educ.	3.617	3.736	3.967	3.070
11. Education in languages, world trade, & world history will be in more demand by students. [36, A]	Likeli of occur.	3.472	3.625	3.306	3.482
	Impact on Educ.	3.615	3.694	3.506	3.644

Table V - Cont'd.

FUTURES ITEMS		District Mean	Community	Staff	Students
12. World resources, behavior, & opinion will have more influence on life in the U.S. [1, B]	Likeli of occur.	4.205	4.376	4.304	3.908
	Impact of Educ.	3.574	3.593	3.777	3.332
13. Shortages of various inputs (e.g., energy material resources) will appear, often with little advance notice. [13, B]	Likeli of occur.	3.718	3.752	3.840	3.530
	Impact on Educ.	3.527	3.460	3.691	3.414
14. Rapid changes in technology will cause many people to frequently retrain & change occupations. [32, A]	Likeli of occur.	3.577	3.604	3.813	3.183
	Impact on Educ.	3.497	3.505	3.735	3.145
15. There will be more jobs for technicians than there are today. [16, C]	Likeli of occur.	3.775	3.923	3.761	3.605
	Impact on Educ.	3.469	3.692	3.603	3.033
16. Learning opportunities for students will be provided throughout the community by business & social agencies, with the school serving to structure & coordinate the students' education. [37, C]	Likeli of occur.	3.247	3.201	3.186	3.412
	Impact on Educ.	3.452	3.422	3.469	3.473

Table VI: The Sixteen High Impact Futures Separated Into Four Categories.

FUTURE CATEGORIES	FUTURES ITEMS (The number associated with each future refers back to Table V, Page 16)	
A. TECHNOLOGY AND INFORMATION	• Through developments in television, a large number different channels will be received on home sets for purposes such as education, shopping and community news. • Computer simulation, games, etc. will permit the students to practice career & management activities, in order to help them choose their adult role. • There will be schools of many sorts with widely varying methods and organizational styles. Public schools will offer choices and students will be free to select the program and style of instruction they prefer.	• The school curriculum will include instruction in skills for coping with a complex society. • Education in languages, world trade, and world history will be in more demand by students. • New information will be continuing to increase at an extraordinary rate. • Modes of teaching & learning will be more flexible utilizing computer-assisted multisensory and yet-to-be developed forms of instruction. • Institutions will provide continuing education throughout life to meet personal and occupational needs.
B. RESOURCES	• Shortages of various inputs (e.g., energy of material resources) will appear, often with little advance notice.	• World resources, behavior, and opinion will have more influence on life in the U.S.
C. SOCIO-DEMOGRAPHIC FACTORS	• Learning opportunities for students will be provided throughout the community by business & social agencies, with the school serving to structure & coordinate the students' education. • There will be more jobs for technicians than there are today.	• Career education and work experience will be available for all students at some time during their public school experience.

Table VI (continued)

D. SOCIO-DEMOGRAPHIC FACTORS	• The population will include a smaller percentage of children and a larger percentage of senior citizens.	• Child-care centers will be much more numerous than at present and will provide developmental and educational components for children.

V. SUMMARY AND RECOMMENDATIONS

The four most salient findings of this study are that:

- New information will continue to increase at an extraordinary rate.
- Technology will continue to develop at a rapid rate and will play both a larger and more important role in our lives.
- Education will be available for members of society from birth to death.
- Both the need for and interest in vocational - technical education and adult education will increase at a much more rapid rate.

The following recommendations are offered to the district, should the district be serious about CHANGING/PROVIDING an educational system which is capable of accommodating either any or all of the above salient futures:

1. A FUTURES STUDY COMMITTEE be formed (made up of major employers, community members, administrators, staff and students).
2. The district consider passing a BOARD POLICY regarding both preparation for the future and specifying that the management team meet biweekly, for no less than four (4) hours, where planning for the future is the topic of discussion (one or two board members might also choose/ want to attend these sessions).
3. A group of funding experts be called together to identify SOURCES OF FUNDING for planning and/or experimentation regarding curriculum, technology, etc., for use in tomorrow's schools.

4. The district sub-contract with an agency to have a study done (perhaps E.R.S.) to RESEARCH what other countries, states and/or school districts are either doing or planning to do in response to the salient findings of this study (This study should not cost more than $3,000.00 to complete).
5. The district form four FUTURES CURRICULUM GROUPS to examine each of the four categories, using the model/process outlined in Figure II, page 61. (These committees might work in conjunction with the District Futures Committee).
6. The district establish at least one EXPERIMENTAL (laboratory) SCHOOL. Such a move (organization) will both permit experimentation and appear extremely attractive to funding agencies.

In closing, money is not the major deterent to changing our style of education from that of educating our youth for yesterday rather than for tomorrow (many foundations, such as Mott, Kettering, Ford and Carnegie make huge investments in futures efforts). Rather, it is our inability to plan, problem-solve, and implement change efforts. This coupled with our, often, total lack of courage is the major deterent. Very few school districts in the United States are able to plan and/or problem-solve on a day-to-day basis, the future is rarely considered. Lake Washington School District, on the other hand, has a good grasp on "today's business". The district's recent track record suggests that the district is capable of moving towards an educational

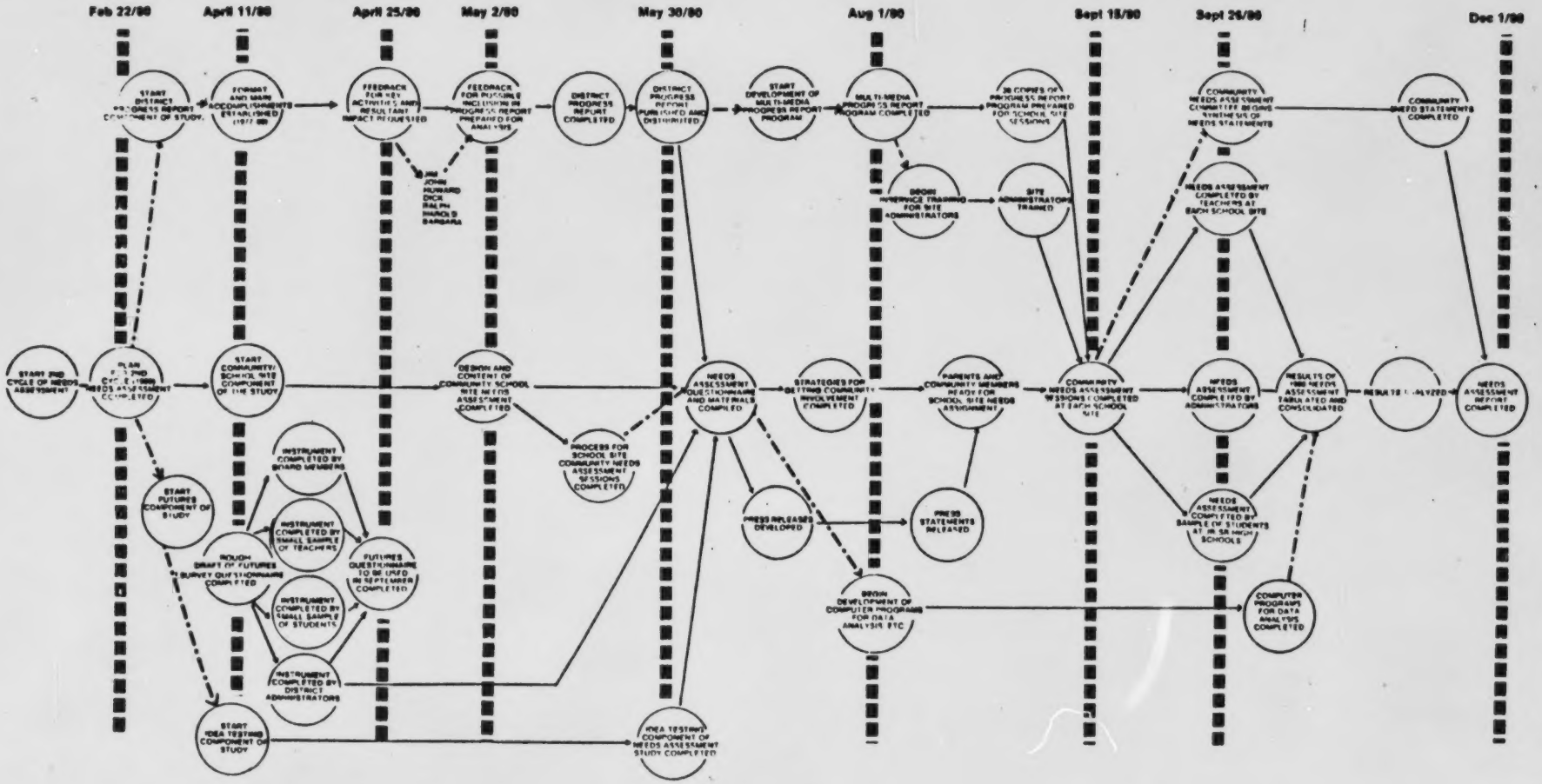
system which is futuristic both in its outlook and practice.

Very few organizations and/or people have the vision to see real opportunities as they present themselves. Most of us can look back and see land and/or stock in which we should have invested but lacked the courage (our excuse for not investing at the time was probably the scarcity of money. Could you not have pulled the funds together had you really wanted to?) Lake Washington School District has arrived at such a cross-road. An opportunity to take a tremendous step forward has presented itself. The Center for Educational Management: Research and Training, at San Diego State University, recognizes the difficulty of this decision and stands prepared to assist the district, in whatever capacity the district should request, in its endeavor to move forward.

APPENDIX A

P.E.R.T. CHART SHOWING THE
SCHEDULE OF ACTIVITIES FOR THE
1980 COMPREHENSIVE NEEDS ASSESSMENT

1980 DISTRICT NEEDS ASSESSMENT PLAN



APPENDIX B

ADMINISTRATOR'S MANUAL FOR CONDUCTING THE LAKE WASHINGTON SCHOOL DISTRICT COMPREHENSIVE NEEDS ASSESSMENT STUDY

ADMINISTRATORS' MANUAL FOR CONDUCTING NEEDS ASSESSMENT SESSIONS WITH STAFF, STUDENTS AND COMMUNITY

SEPTEMBER 1980

LAKE WASHINGTON SCHOOL DISTRICT No. 414

SUPERINTENDENT: DR. L.E. SCARR

DIRECTOR
PLANNING AND EVALUATION: DR. R. A. LEHMAN

TABLE OF CONTENTS

1. RESPONSIBILITIES AND MANAGEMENT SCHEDULE . . . . . .

2. MATERIALS AND RESOURCES NEEDED FOR 1980 NEEDS ASSESSMENT SESSIONS. . . . . .

3. SUGGESTED PROCESS/SCHEDULE FOR 1980 NEEDS ASSESSMENT MEETINGS (PARENTS/STAFF/STUDENTS)

4. SAMPLE LETTERS . . . . . .

   A. LETTER INVITING AND ENCOURAGING PARENTS TO PARTICIPATE.

   B. LETTER THANKING PARENTS FOR THEIR PARTICIPATION.

MATERIALS AND RESOURCES NEEDED

1. WORKSHOP TEAMS (SUGGESTED)
   - A. DIRECTOR (1)
   - B. ASSISTANT DIRECTOR (1)
   - C. MONITORS (1 PER 10 PARTICIPANTS. A MONITOR SHOULD BE ABLE TO HANDLE TWO SMALL GROUPS: I.E. 8-10 INDIVIDUALS.)
   - D. REFRESHMENT COORDINATOR (1)
   - E. REGISTRATION/DATA OFFICER (2)
   - F. GREETERS (COUPLE OF PARENTS AND/OR STUDENTS.)
2. MATERIALS AND EQUIPMENT
   - A. ALPHABETICAL LIST OF PARENTS PLANNING TO ATTEND.
   - B. NAME TAGS
   - C. PENCILS
   - D. SLIDE PROJECTOR AND SCREEN
   - E. OVERHEAD PROJECTOR
   - F. EXTENSION CORD
   - G. LARGE NEWSPRINT PAD
   - H. 10 LARGE HEFTY MARKERS (ONE FOR EACH SMALL GROUP)
   - I. DIRECTION SIGNS
     1. Registration
     2. Meeting Room
     3. Refreshments
     4. Wash Rooms
     5. Etc.
   - J. 1980 NEEDS ASSESSMENT KIT
     SEE 1980 NEEDS ASSESSMENT KIT AND CHECK-OFF CONTENTS

SUGGESTED PROCESS/SCHEDULE

FOR

PARENT/STAFF AND STUDENT MEETINGS

1.	WELCOME AND REGISTER	
2.	SEAT INDIVIDUALS IN SMALL GROUPS OF 4 - 5 (NOTE: YOU MAY WISH TO BREAK PEOPLE UP, I.E., ASSIGN THEM TO GROUPS ON A RANDOM BASIS.)	
3.	INTRODUCTION: SHOW THE AGENDA AND INTRODUCE THE SESSION BY SHOWING THE 7 INTRODUCTORY OVERLAYS	10 MINS.
4.	INTRODUCE (1 OVERLAY) AND SHOW THE MULTI-MEDIA PROGRESS REPORT	15 MINS.
5.	DISTRIBUTE QUESTIONNAIRES INTRODUCE PART I (1 OVERLAY) AND HAVE PARTICIPANTS COMPLETE IT.	25 MINS.
6.	INTRODUCE PART II (1 OVERLAY) AND HAVE PARTICIPANTS COMPLETE IT.	10 MINS.
7.	INTRODUCE PART III (1 OVERLAY) AND HAVE PARTICIPANTS COMPLETE IT.	5 MINS.
8.	SECONDARY ONLY: INTRODUCE PART IV (1 OVERLAY) AND HAVE PARTICIPANTS COMPLETE IT.	5 MINS.
9.	COLLECT COMPLETE QUESTIONNAIRES	
10.	BREAK	10 MINS.
11.	INTRODUCE CONCERNS IDENTIFICATION PROCESS (1 OVERLAY) DISTRIBUTE THE LIKES FORM (PINK FORMS); AND INTRODUCE LIKES PROCESS.	3 MINS.
12.	HAVE PARTICIPANTS COMPLETE LIKES	2 - 5 MINS.
13.	DISTRIBUTE DISLIKES FORMS (YELLOW) SHEETS, EXPLAIN DIRECTION (ONE OVERLAY) AND HAVE INDIVIDUALS IDENTIFY THEIR DISLIKES.	15 MINS.

14. DISTRIBUTE INSTRUCTIONS FOR AND INTRODUCE THE SMALL GROUPS. — 5 MINS.

    DISLIKES-CONSOLIDATION PROCESS (ONE OVERLAY)

    DISTRIBUTE LARGE SHEETS OF NEWSPRINT AND MARKER PENS.

15. HAVE SMALL GROUPS COMPLETE THE CONSOLIDATION OF DISLIKES. — 15 MINS.

16. INTRODUCE THE MAJOR CHANGES

    PROCESS (ONE OVERLAY), HAND OUT FORMS (WHITE) AND HAVE INDIVIDUALS COMPLETE. — 5-10 MINS.

17. COLLECT ALL PINK (LIKES), YELLOW SHEETS (DISLIKES) AND NEWSPRINT SHEETS (CONSOLIDATED GROUP DISLIKES.)

18. THANK PARTICIPANTS AND GIVE EACH A COPY OF THE FUTURES QUESTIONNAIRE IN A SELF-ADDRESSED POSTAGE PAID ENVELOPE)

19. RETURN ALL SHEETS TO BOB LEHMAN.

RESPONSIBILITIES AND MANAGEMENT SCHEDULE

District Dr. R. A. Lehman's Office	Date	Date	School Sites School Coordinating Teams
Develop all materials for the 1980 District Needs Assessment.	July 1, 1980	July 1, 1980	Rest and Prepare both mentally and physically for the 1980 NEEDS ASSESSMENT
Prepare manual for administering the 1980 Needs Assessment Sessions.	July 1, 1980		
Duplicate sufficient material for Administrators' In-Service training	August 1, 1980	August 1, 1980	
Run two sets of labels for each school.	August 1, 1980		
Package Materials for Administrators' In-service Training.	August 1, 1980		
Complete and prepare the Multi-Media Progress Report	August 1, 1980		
Provide Administrators' In-service Training	August 5, 1980		Attend the Administrators' In-Service Training for the 1980 Needs Assessment.
Estimate and duplicate materials, etc. for Parent, Staff and Student Needs Assessment Sessions	August 15, 1980	August 15, 1980	Secure and book facilities for September 15th Community Sessions
			Contact parents (letter, telephone, prayer, etc.)
		Sept. 11, 1980	**Report final number of committed parents to Bob Lehman (828-3228)
Deliver materials for Parent, Staff and Student Sessions to Schools	Sept. 12, 1980	Sept. 12, 1980	Formalize/Review the team's plan for carrying out the Parents' Needs Assessment Session.
		Sept. 15, 1980	Prepare facilities; make sure all equipment, materials, etc. is ready to go (See material/ equipment check off list)
		Sept. 15, 1980	** Conduct Parent Needs Assessment Session at School.
		Sept. 16, 1980	** Package and return completed questionnaires, etc. to Bob Lehman.
		Sept. 16, 1980	Send "Thank You" letter to parents who participated.
		Sept. 15-19, 1980	** Conduct Needs Assessment with Staff and Students and return completed questionnaires, etc. to Bob Lehman.
Schedule and Secure Facilities for Needs Consolidation Committee	Sept. 19, 1980		
Put together materials, Data, etc., for Needs Consolidation Process.	Sept. 22, 1980		
Support Needs Consolidation Committee	Sept. 22 - October 6, 1980		
Receive Consolidated Needs from Committees and merge the results into the other Needs Assessment Data	October 6, 1980 October 20, 1980		
Prepare Needs Assessment Summary for District and by School	October 20, 1980		

COMMENTS/IDEAS

	REASONING BEHIND
1. BREAK PEOPLE UP WHEN YOU SEAT THEM IN SMALL GROUPS OF 4-5.	GROUPS WILL BE MORE TASK ORIENTED AND LESS TALK/ SOCIAL ORIENTED.
2. HAVE A DISTRICT GREETING LETTER, PROGRESS BROCHURE AND AGENDA AT EACH SEATING STATION. DO NOT HAND OUT THE QUESTIONNAIRE UNTIL AFTER THE MULTI-MEDIA PROGRESS REPORT.	PEOPLE WILL BE MORE FOCUSED (PAY ATTENTION) AND LESS THREATENED/SHOCKED (QUESTIONNIARE LOOKS LIKE A LOT OF WORK, ETC). IT IS BETTER TO MOTIVATE PEOPLE AND SET POSITIVE ATTITUDES PRIOR TO THE WORK AT HAND.

Lake Washington School District No. 414
P.O. BOX 619 • KIRKLAND, WASHINGTON 98033

SAMPLE
Draft

Dear Parents:

Is _____ meeting the needs of your child?
School Name

What do you dislike about _____?
School Name

What changes would you like to see made at this school in the next few years?

In order to help us answer these questions, we need to hear from you. On Monday, September 15, 1980, at 7:30 p.m., we are holding a PARENT MEETING in the _____
location

where you will participate in a NEEDS ASSESSMENT SESSION FOR THIS SCHOOL.

Please return this letter to the school after having checked one of the responses below.

Sincerely,

Principal

☐ I will attend the September 15th Meeting.

☐ I will not be able to attend the September 15 Meeting.

SAMPLE THANK YOU LETTER

Dear_____:

I would like to thank you for taking the time from your busy schedule to spend an evening working with other parents on the 1980 Lake Washington School District Needs Assessment. The small groups elected at the session are busy analyzing the data and developing Needs Assessment for _____.
(school name)

Again, thank you for making the special effort on September 15. The faculty, staff and administration at this school will be making a special effort during 1980-83 to respond to and meet the resultant needs of your special effort.

Sincerely,

APPENDIX C

THE LAKE WASHINGTON SCHOOL
DISTRICT FUTURES QUESTIONNAIRE

LAKE WASHINGTON SCHOOL DISTRICT No. 414

FUTURES

INSTRUCTIONS: Please read carefully before beginning this questionnaire.

The following questionnaire is composed of a set of propositions about future society in the world and the United States in the decade of the 1980's. We need two opinions from you:

1. The likelihood that these events will come to pass in this decade; and
2. The impact that they will have on education in the Lake Washington School District should they happen.

A. Scoring: Two scales should be used for each student. The Likelihood of Occurrence Scae and the Educational Impact Scale.

Likelihood of Occurrence Scale		Educational Impact on District Scale
0 = Absolutely NO Likelihood	(0% Chance)	0 = Absolutely NO Impact
1 = Low Likelihood	(1-20% Chance)	1 = Low Impact
2 = Moderately Low	(21-40% Chance)	2 = Moderately Low
3 = Average	(41-60% Chance)	3 = Medium Impact
4 = Moderately High	(61-80% Chance)	4 = Moderately High
5 = High Likelihood	(81-100% Chance)	5 = High Impact

B. The time frame that we are interested in is this decade, the 1980's. If you believe that an event will have occurred during this time frame your response on the LIKELIHOOD SCALE should be a 4 or 5. If, on the other hand you believe that an event has little to no chance of occurring, your response should be a '0' or '1'.

C. For the IMPACT SCALE, the question you are responding to is, "If this event occurs, what IMPACT will it have on EDUCATION IN THE LAKE WASHINGTON SCHOOL DISTRICT? If a significant impact would result, enter a 4 or 5. If, on the other hand, little or no impact would result, enter a 0 or 1.

D. Optional: Whenever you rate Educational Impact high, score of 4 or 5, would you jot down a word or phase (immediately below or just to the right of the impact score) to suggest the area or facet of education you feel will be affected (e.g., school taxes, attendance, accountability, curriculum, facilities, etc.)

E. Comparative statements in the questionnaire refer to the year 1980 unless otherwise stated.

F. Space is provided on the last page for your own propositions. Please feel free to add to the list, scoring your own proposition statements in the same manner.

LAKE WASHINGTON SCHOOL DISTRICT No. 414

FUTURES STUDY

Likelihood of Occurrence

0 = No Chance
1 = Low Likelihood
2 = Moderately Low
3 = Average
4 = Moderately
5 = High Likelihood

Educational Impact on Lake Washington School District

0 = Absolutely NO Impact
1 = Low Impact
2 = Moderately Low
3 = Medium
4 = Moderately High
5 = High Impact

	LIKELIHOOD OF OCCURRENACE (Score 0-5)	IMPACT ON EDUCATION (Score 0-5)	AREA OF IMPACT
	In the world, in the 1980's. . . .		
____	1. World resources, behavior, and opinion will have more influence on life in the U.S.	_____	_____
____	2. Underdeveloped countries will control their natural resources.	_____	_____
____	3. There will be world-wide recognition of the dangers of population growth and pollution of the biosphere.	_____	_____
____	4. The population will include a smaller percentage of children and a larger percentage of senior citizens.	_____	_____
____	5. People will be more alike with fewer cultural and geographic differences and less class distinction.	_____	_____
____	6. Residential and work places will be located in closer together to reduce transportation-related problems.	_____	_____
____	7. It will be national policy to provide meaningful employment to all who wish to work.	_____	_____
____	8. New national programs will have been created by the federal government for planning and regulation of health, social welfare, and education.	_____	_____
____	9. Political and social pressure to improve the lives of senior citizens will have increased.		
____	10. New information will be continuing to increase at an extraordinary rate.	_____	_____
____	11. Through developments in television, a large number of different channels will be received on home sets for purposes such as education, shopping, and community news.	_____	_____

Likelihood of Occurrence

0 = No Chance
1 = Low
2 = Moderately Low
3 = Average
4 = Moderately High
5 = High Likelihood

Education Impact on Lake Washington School District

0 = No Impacts
1 = Low
2 = Moderately Low
3 = Medium
4 = Moderately High
5 = High

		LIKELIHOOD OF OCCURRENCE (Score 0-5)	IMPACT ON EDUCATION (Score 0-5)	AREA OF IMPACT
	In the United States, in the 1980's. . .			
___	12. Operation round the clock, seven days a week, will be more common in manufacturing, retail, and service industries.		_____	_____
___	13. Shortages of various inputs (e.g., energy, material resources) will appear, often with little advance notice.		_____	_____
___	14. A higher proportion of the total labor force will be employed in pollution control and environmental protection activities.		_____	_____
___	15. A smaller proportion of the work force will be needed in goods-producing industries, while a larger proportion will be needed in the service industries.		_____	_____
___	16. There will be more jobs for technicians than there are today.		_____	_____
___	17. More job descriptions will require people with human skills, i.e., openness, compassion, warmth, and tolerance.		_____	_____
___	18. Certification by demonstration of skills rather than by diploma, degree, or completion of prescribed training sequences will be in wide use and generally accepted in education, professional, and business practice.		_____	_____
___	19. A shorter work week and more leisure time will be the rule for most workers.		_____	_____
___	20. Compulsory retirement at a set age will be enforced regardless of health, ability, or desire of the worker.		_____	_____
___	21. People will need to be more self-motivated and self-directed than they are presently.		_____	_____
___	22. Sexual relationships of varied types will be openly accepted.		_____	_____
___	23. Child-care centers will be much more numerous than at present and will provide developmental and educational components for children.		_____	_____
___	24. Many couples will divide bread-winning, household, and child-care duties on grounds other than sex.		_____	_____
___	25. It will be possible to achieve chemical control of many undesirable negative, primitive, and aggressive behavioral tendencies in man.		_____	_____
___	26. There will be schools of many sorts with widely varying methods and organizational styles. Public schools will offer choices and students will be free to select the program and style of instruction they prefer.		_____	_____

Likelihood of Occurrence

0 = No Chance 3 = Average
1 = Low 4 = Moderately High
2 = Moderately Low 5 = High Likelihood

Education Impact on Lake Washington School District

0 = No Impacts 3 = Medium
1 = Low 4 = Moderately High
2 = Moderately Low 5 = High

		LIKELIHOOD OF OCCURRENCE (Score 0-5)	IMPACT ON EDUCATION (Score 0-5)	AREA OF IMPACT
	In the United States, in the 1980's. . .			
____	27. Modes of teaching and learning will be more flexible utilizing computer-assisted, multisensory and yet-to-be-developed forms of instruction.		_____	_____
____	28. Futuristic studies will be part of the curriculum.		_____	_____
____	29. Career education and work experience will be available for all students at some time during their public school experience.		_____	_____
____	30. Computer simulation, games, etc. will permit the students to practice career and management activities, in order to help them choose their adult role.		_____	_____
____	31. Institutions will provide continuing education throughout life to meet changing personal and occupational needs.		_____	_____
____	32. Rapid changes in technology will cause many people to frequently retrain and change occupations.		_____	_____
____	33. Early childhood education will be provided by the public schools for most children beginning at age three or four, (school, day-care center, or other).		_____	_____
____	34. The school curriculum will include instruction in skills for coping with a complex society.		_____	_____
____	35. Ability to read will be less important as a tool for gaining information.		_____	_____
____	36. Education in languages, world trade, and world history will be in more demand by students.		_____	_____
____	37. Learning opportunities for students will be provided throughout the community by business and social agencies, with the school serving to structure and coordinate the students' education.		_____	_____

YOUR PROPOSITIONS

You may have special knowlege or interest that suggest other propositions that have a high likelihood of occurrence and should be included. Please add them here and score as above. Use extra pages if you need more space.

(Do Not Forget to Score Each of Your Propositions)

APPENDIX D

SUMMARY OF THE EFFECT, THAT EACH FUTURE WOULD HAVE ON EDUCATION IN THE DISTRICT WERE IT TO ACTUALLY OCCUR

1. New information will be continuing to increase at an extraordinary rate.

Likelihood of Occurrence	4.156
Impact on Education	3.989

vital information
curriculum
different things to teach
accountability curriculum
curriculum current events
stress curriculum
curriculum revisions
more difficult to use
just school for pushing information out
curriculum, accountability
science and technical subjects/plus more efficiency in operation
libraries
students will learn to be users of resources
taxes less
methods of instruction materials, curriculum priorities
curriculum charges
greater pressure on education to teach more
more computerization, more specialization
facilities, accountability
Inservice

more need for the humanistic person who can feel good enough about self to search out any needed knowledge
new ideas
programs
attempt on part of schools to dissiminate it
curriculum facilities
must learn more
larger classes
school gets harder, have to know more
technology
students learn more
learning material
new ideas and new problems
students, scientists almost all people of adult age
all more to teach to students
learning about current events
more experiments
change in curriculum
higher education will continue to move toward the lower grades
time allotments
as now
science
all areas of study
students will learn of the information through school

2. Career education and work experience will be available for all students at some time during their public school experience.

Likelihood of Occurrence	3.924
Impact on Education	3.976

facilities
teacher training & course offering
curriculum
more vocational classes
change in curriculum thrust
already starting
more counselors
should but will not happen
K-12
taxes
more individual approaches
should be now!!
start now
better programs to meet needs

prepare for help
kids
students
less non-workers
taxes
being prepared for the real world
career education
new programs financial
tremendous amount of administration needed
relevancy in school
already happening
scheduling; credits

3. Modes of teaching & learning will be more flexible utilizing computer-assisted multisensory and yet-to-be developed forms of instruction.

Likelihood of Occurrence	3.637
Impact of Education	3.851

facilities & equipment
curriculum
accountability
use of named systems in schools
need more audio-visual
support staff
costs money, where will it come from?
teacher training/funding
Get going!
dollars!
better programs for individual needs

help students
teachers/students
funner schools
current taxes
would be good for the gifted
whole school
free teacher to teach slow learners
doubt we'll see this in this decade
equipment, materials

4. Institutions will provide continuing education throughout life to meet changing personal and occupational needs.

Likelihood of Occurrence	3.887
Impact on Education	3.753

adult education
curr./facilities
more varied offerings
schools necessitating curr./
technical training
curr. & technical training
taxes
more specialized classes
everything
public schools may have to become more public
more money to fund it
new facilities & instructors or great strain on both
employment costs

need more schools
teachers
students
less students
lazier students
taxes
more schooling after college
post high school work
adult education funds
curr. change
vocational education
facilities/equipment

5. Through developments in television, a large number of different channels will be received on home sets for purposes such as education, shopping and community news.

Likelihood of Occurrence	3.887
Impact on Education	3.685

only if the T.V. is used as a video screen for a home computer
more teachers monitoring a less direct teaching as machines take over
fewer teachers; have to train people to use them
curriculum reduction in teaching force
transportation and curriculum
computer education will be needed to handle increase in information
home education
more and better education programming
extension counsel/classroom T.V.
a need is there
accountability
new methods of presenting information-less teacher-teaching
alternatives to public schools
curriculum
Please! Stop before the teacher is replaced with a T.V. screen
values
not chosen by students

need to insure and encourage personal forms of entertainment, ie. reading, etc.
available for use in schools; bored kids who are hooked on T.V.
students will spend more time in front of the tube, and expect to be challenged more in school
kids will learn while they watch television
help economics
T.V. in school and more home learning
students - almost all people
all, less students
watching educational T.V. at school
attendance
cost a lot of money
curriculum attendance
home study
classroom teacher
social behavior and attitudes
methods
curriculum facilities
change in curriculum
kids and adults will take home classes
better awareness
education through T.V.

6. Child-care centers will be much more numerous than at present and will provide developmental and educational components for children.

Likelihood of Occurrence	3.894
Impact on Education	3.675

curriculum
facilities taxes
more teachers for pre-school-aged kids
accountability
earlier schooling
earlier graduation,
students enter school with more background
already apparent
taxes
single parent children will benefit
attendance to public schools
teaching of roles
better quality kindergarteners
schools will be expected to provide discipline instead of the home
social abilities, behavior and attitudes

maybe nursery
smarter people
more small schools
mothers
students, less need for school
more self sufficient kids
more moms will work
with inflation more both parents will have to work
more pre-school training
would hope public schools would be involved to help control direction of pre-school experience
less family life, financial programs
education at lower levels mandated
school operations

7. Computer simulation, games, etc. will permit the students to practice career & management activities, in order to help them choose their adult role.

Likelihood of occurrence	3.579
Impact on Education	3.644

equipment/facilities
curr.
cost of training personnel
attendance
career planning
curr. tech. training
computers will become common place
start K-6
new progress financial
better preparedness for real world
simulation games are not basic to most people

help kids handle life
students
less drop outs
career awareness
use of tech. in the classroom
taxes
career education
doubt we'll be able to afford this, this decade
more materials
poor little kids, childhood will no longer be in the vocabulary

8. There will be schools of many sorts with widely varying methods and organizational styles. Public schools will offer choices and students will be free to select the program and style of instruction they prefer.

Likelihood of occurrence	3.111
Impact on Education	3.622

curriculum, school facilities, taxes
greater variety of selections
updating of some inst.
offer a wide variety of classes at interests & needs of the population
teacher training
money/staff
learn decision-making skills
nice ideal though
individual instruction
research in learning styles should influence this highly
more schools, teachers and higher costs
personal motivation

different system of education
more skills
more special classes
help kids with what they learn best
students
less drop outs
whole school
choices will be restricted
every area
teachers will also have to adapt
schools will have to change curr. drastically

9. The school curriculum will include instruction in skills for coping with a complex society.

Likelihood of occurrence	3.574
Impact on Education	3.620

curriculum
instruction for teachers
evident already
hopefully!
it will be expected
social studies
history
should!
change in curr.
programs to be developed
if not it should
has already begun

more classes
need teachers
prepare for society
students
coping skills
curr. psychology
attendance, success of students
training
more staff, higher costs
it had better
personnel curr.

10. The population will include a smaller percentage of children and a larger percentage of senior citizens.

Likelihood of occurrence	3.604
Impact on Education	3.617

Adult Education, health care curr.
declining enrollment, less number of teachers
attendance - school taxes
attendance, facilities
student count less teachers
closing schools
enrollment
fewer students
less schools, opportunity to provide quality education
attendance, taxes
we are not involved in this impact
facilities (excess)
I think more children and more senior citizens
buildings, closure, class size
taxes, number of children to serve
taxes, fewer teachers, attendance
science - health
social groups
whole school
enrollment
finances
closure of schools
few schools
facilities and money available
need fewer teachers
number of schools
economics demands
less and smaller schools
fewer schools, surplus

education of children will be lower on public priority list
teacher lay-offs
more continuing education needed - less regular schools
financial programs, teacher relations
supply/demand of teachers could increase salaries
smaller classes
classes too large
teachers class size
less students
need more teachers for children
enrollment number
school size
everyone
all (less students)
less students
taxes
more schools
buildings
taxes/facilities
curriculum
schools closed or used in other ways
obvious cut backs in need for school growth
this will go in cycles
world population
declining enrollment
more adult education
a chance to really educate children
class population
class size, programs, funding
staff

11. Education in languages, world trade, and world history will be in more demand by students.

Likelihood of occurrence	3.472
Impact on Education	3.615

dreamer
foreign language at elementary grades
more course offerings
social science & foreign language teachers
better trained teachers
world will be more accessible to many
language

curr./personnel
trend away from foreign language

more classes
more knowledge

students
world relations
more for lang. in elem. school

higher costs more staff
new faculty, texts hence, budget item
world shrinking fast

12. World resources, behavior, and opinion will have more influence on life in the U.S.

Likelihood of occurrence	4.205
Impact on Education	3.574

energy, peace
busing (gas)
conservation education
reading material
facilities, curriculum
world affairs, current affairs
taxes, curriculum, facilities
energy
Humanities, Social Studies
enrollment
Social Studies and Relationships
energy curriculum
all areas
total curriculum
taxes
world resources
energy
heat, lights
curriculum, taxes
finances/future needs in professions
E.S.L. classes & cultural studies
financial, educational, leisure
supplies, subjects
materials
cost of running school
all facets of life

energy conservation
resources available
accountability
better use of facilities to save on utilities; curriculum
material available
attitudes toward school
less transportation, no new books, paper
no busing, less gas or oil
less oil, gas, economic crunch
taxes, classes
student spirit, morale
transportation
adults
all
more history
we're our own country
foreign language, Social Studies
overall impact
costs, funding
everything
facilities, transportation
less affluence
economics, politics

13. Shortages of various inputs (e.g., energy of material resources) will appear, often with little advance notice.

Likelihood of occurrence	3.718
Impact on Education	3.527

curriculum	all areas of school programs
transportation elect city for rooms	less dittos, paper supplies, etc.
attendance, facilities	curriculum
taxes, work, schedules	financial programs
length school day/school week - change to summer schedules	facilities
	materials used
curriculum money	shortage of materials and fuel
disrupt present school day operation	supplies
	facilities/attendance
school construction	most shortages seem due to personnel error
fewer materials	cut backs
transportation, supplies	no oil, books, etc.
maintenance	crunch econ.
maintenance and operation	all people
school supplies, fuel	all, less materials for supplies
cost	less paper
heat - gas	taxes
paper shortage	science
behavior, attitudes, increase anxiety of children	through special studies
	survival, what to do
supplies/transport	cost of running school
learning candidates	values
	creative ways of teaching

14. Rapid changes in technology will cause many people to frequently retrain and change occupations.

Likelihood of occurrence	3.577
Impact on Education	3.497

curriculum	need more schools
training program	teachers
teachers need more specialization	more cash
new skills taught	workers
change in direction of curriculum	new teachers
taxes, adult education program	not this decade
programs financial at secondary level	felxibility in education
	schools will have to keep up
more evening, weekend and short courses	employment costs
insecurity among children	
maybe they won't be as serious about just one	

15. There will be more jobs for technicians than there are today.

Likelihood of occurrence	3.775
Impact on Education	3.469

curr./facilities	students, workers
career/education	technical training
more science and math	job opportunity
vocational education	computers
math	have to know more, take special classes
vocational training	
curr. changes	classes & programs
curr. priorities	taxes
restructuring courses	career awareness
more training possibilities	what kids are interested in
job training	
there will be fewer but higher sillled technicians	

16. Learning opportunities for students will be provided throughout the community by business & social agencies, with the school serving to structure & coordinate the students' education.

Likelihood of occurrence	3.247
Impact on Education	3.452

greater coordination between school & other services	hopefully if available
persons willing to do this	
businesses	whole school & business
reorganization integration of resources/programs/instructional	staff
great idea	curr.
subjects	teachers
business vocational	curr. job training
curr./taxes	more guest speakers-
coordin. b/wn school & business	change in curr.
better prepared for life	added counselors & organizations
new programs	we'll all be bright clones
has begun to some extent	

APPENDIX E

DISTRICT AND POPULATION FREQUENCY DISTRIBUTION FOR EACH FUTURES ITEM

Table VII. District and Population Frequency Distribution For Each Futures Item

FUTURES ITEMS IN THE ORDER THEY APPEARED ON THE QUESTIONNAIRE.	DISTRICT SUMMARY FREQUENCY	DIST. SUMM. MEAN $\bar{X}$	COMMUNITY FREQUENCY	COMM. MEAN $\bar{X}$	STAFF FREQUENCY	STAFF MEAN $\bar{X}$	STUDENT FREQUENCY	STUDENT MEAN $\bar{X}$
1. World resources, behavior, & opinion will have more influence on life in U.S.	Likelihood of occurrence 5 25 37 195 372 622 0 1 2 3 4 5	4.205	Likelihood of occurrence — 3 9 58 116 248 0 1 2 3 4 5	4.376	Likelihood of occurrence 1 7 10 49 139 225 0 1 2 3 4 5	4.304	Likelihood of occurrence 4 15 18 88 117 149 0 1 2 3 4 5	3.908
	Impact on Education 9 68 89 382 417 273 0 1 2 3 4 5	3.574	Impact on Education 3 22 34 122 153 94 0 1 2 3 4 5	3.593	Impact on Education 3 13 17 117 164 108 0 1 2 3 4 5	3.777	Impact on Education 3 33 38 143 100 71 0 1 2 3 4 5	3.332
2. Underdeveloped countries will control their natural resources.	Likelihood of occurrence 35 214 271 285 272 164 0 1 2 3 4 5	2.836	Likelihood of occurrence 6 72 74 105 105 66 0 1 2 3 4 5	3.002	Likelihood of occurrence 12 64 91 93 102 64 0 1 2 3 4 5	2.941	Likelihood of occurrence 17 78 106 87 65 34 0 1 2 3 4 5	2.535
	Impact on Education 148 289 215 298 191 81 0 1 2 3 4 5	2.277	Impact on Education 33 91 77 111 72 34 0 1 2 3 4 5	2.478	Impact on Education 32 79 77 116 80 33 0 1 2 3 4 5	2.556	Impact on Education 83 119 61 71 39 14 0 1 2 3 4 5	1.757
3. There will be world-wide recognition of the dangers of population growth & pollution of the biosphere.	Likelihood of occurrence 13 70 118 323 407 319 0 1 2 3 4 5	3.598	Likelihood of occurrence 2 19 35 129 136 113 0 1 2 3 4 5	3.652	Likelihood of occurrence 3 37 50 96 143 101 0 1 2 3 4 5	3.493	Likelihood of occurrence 8 14 33 98 128 105 0 1 2 3 4 5	3.655
	Impact on Education 31 90 167 359 367 216 0 1 2 3 4 5	3.292	Impact on Education 8 38 65 137 121 55 0 1 2 3 4 5	3.156	Impact on Education 11 29 57 120 129 72 0 1 2 3 4 5	3.299	Impact on Education 12 23 45 102 117 89 0 1 2 3 4 5	3.433
4. The population will include a smaller % of children & a larger % of senior citizens.	Likelihood of occurrence 34 96 108 239 389 384 0 1 2 3 4 5	3.604	Likelihood of occurrence 3 12 19 75 154 168 0 1 2 3 4 5	4.016	Likelihood of occurrence — 8 19 76 160 166 0 1 2 3 4 5	4.060	Likelihood of occurrence 31 76 70 86 75 50 0 1 2 3 4 5	2.639
	Impact on Education 36 79 102 257 394 368 0 1 2 3 4 5	3.617	Impact on Education 3 19 37 83 160 125 0 1 2 3 4 5	3.736	Impact on Education 6 8 20 93 129 167 0 1 2 3 4 5	3.967	Impact on Education 27 52 45 81 105 76 0 1 2 3 4 5	3.070
5. People will be more alike with fewer cultural & geographic differences & less class distinction.	Likelihood of occurrence 81 305 314 310 163 63 0 1 2 3 4 5	2.290	Likelihood of occurrence 26 116 118 98 60 15 0 1 2 3 4 5	2.219	Likelihood of occurrence 22 111 106 118 51 22 0 1 2 3 4 5	2.305	Likelihood of occurrence 33 78 90 94 52 26 0 1 2 3 4 5	2.354
	Impact on Education 96 223 248 380 179 69 0 1 2 3 4 5	2.444	Impact on Education 36 100 97 118 50 13 0 1 2 3 4 5	2.205	Impact on Education 24 72 87 139 61 27 0 1 2 3 4 5	2.541	Impact on Education 36 51 64 123 68 29 0 1 2 3 4 5	2.601

FUTURE ITEMS IN THE ORDER THEY APPEARED ON THE QUESTIONNAIRE.	DISTRICT SUMMARY FREQUENCY	DIST. SUMM. MEAN $\bar{X}$	COMMUNITY FREQUENCY	COMM. MEAN $\bar{X}$	STAFF FREQUENCY	STAFF MEAN $\bar{X}$	STUDENT FREQUENCY	STUDENT MEAN $\bar{X}$
6. Residential & work places will be located in closer together to reduce transportation related problems.	Likelihood of occurrence 17 118 189 353 382 183 0 1 2 3 4 5	3.219	Likelihood of occurrence 3 47 74 132 131 47 0 1 2 3 4 5	3.111	Likelihood of occurrence 5 46 59 118 131 67 0 1 2 3 4 5	3.232	Likelihood of occurrence 9 25 56 103 120 69 0 1 2 3 4 5	3.327
	Impact on Education 66 167 190 377 276 134 0 1 2 3 4 5	2.853	Impact on Education 24 69 77 121 101 36 0 1 2 3 4 5	2.734	Impact on Education 12 52 57 128 104 57 0 1 2 3 4 5	3.051	Impact on Education 30 46 56 128 71 41 0 1 2 3 4 5	2.772
7. It will be national policy to provide meaningful employment to all who wish to work.	Likelihood of occurrence 94 235 275 354 192 85 0 1 2 3 4 5	2.462	Likelihood of occurrence 27 100 104 121 55 22 0 1 2 3 4 5	2.333	Likelihood of occurrence 31 83 94 133 67 18 0 1 2 3 4 5	2.413	Likelihood of occurrence 36 52 77 100 70 45 0 1 2 3 4 5	2.661
	Impact on Education 101 196 229 356 209 106 0 1 2 3 4 5	2.580	Impact on Education 40 81 97 104 63 33 0 1 2 3 4 5	2.402	Impact on Education 26 69 78 129 77 30 0 1 2 3 4 5	2.616	Impact on Education 35 46 54 123 69 43 0 1 2 3 4 5	2.741
8. New national programs will have been created by the federal government for planning, & regulation of health, social welfare, etc.	Likelihood of occurrence 11 58 134 381 440 196 0 1 2 3 4 5	3.450	Likelihood of occurrence 3 26 50 134 146 71 0 1 2 3 4 5	3.412	Likelihood of occurrence 4 17 46 122 163 76 0 1 2 3 4 5	3.521	Likelihood of occurrence 4 15 38 125 131 49 0 1 2 3 4 5	3.412
	Impact on Education 18 80 127 367 350 241 0 1 2 3 4 5	3.417	Impact on Education 3 27 52 127 123 87 0 1 2 3 4 5	3.434	Impact on Education 5 23 34 133 131 84 0 1 2 3 4 5	3.498	Impact on Education 10 30 41 107 96 70 0 1 2 3 4 5	3.304
9. Political & social pressure to improve the lives of senior citizens will increase.	Likelihood of occurence 5 26 87 308 488 279 0 1 2 3 4 5	3.748	Likelihood of occurrence -- 6 20 99 172 126 0 1 2 3 4 5	3.927	Likelihood of occurrence -- 3 20 100 190 111 0 1 2 3 4 5	3.910	Likelihood of occurrence 5 17 47 109 126 42 0 1 2 3 4 5	3.329
	Impact on Education 86 137 144 233 144 57 0 1 2 3 4 5	2.478	Impact on Education 20 53 45 86 63 25 0 1 2 3 4 5	2.664	Impact on Education 13 36 59 94 60 23 0 1 2 3 4 5	2.775	Impact on Education 53 48 40 53 21 9 0 1 2 3 4 5	1.857
10. New information will be continuing to increase at an extraordinary rate.	Likelihood of occurrence 5 12 52 233 314 580 0 1 2 3 4 5	4.156	Likelihood of occurrence 1 -- 9 61 107 244 0 1 2 3 4 5	4.382	Likelihood of occurrence 1 2 8 75 106 231 0 1 2 3 4 5	4.307	Likelihood of occurrence 3 10 35 97 101 105 0 1 2 3 4 5	3.704
	Impact on Education 12 29 63 241 347 487 0 1 2 3 4 5	3.989	Impact on Education 2 4 11 76 146 179 0 1 2 3 4 5	4.146	Impact on Education -- 7 18 84 120 186 0 1 2 3 4 5	4.108	Impact on Education 10 18 34 81 81 122 0 1 2 3 4 5	3.657

FUTURE ITEMS IN THE ORDER THEY APPEARED ON THE	DISTRICT SUMMARY FREQUENCY	DIST. SUMM. MEAN $\bar{X}$	COMMUNITY FREQUENCY	COMM. MEAN $\bar{X}$	STAFF FREQUENCY	STAFF MEAN $\bar{X}$	STUDENT FREQUENCY	STUDENT MEAN $\bar{X}$
11. Through developments in TV a large number of different channels will be received on home sets for education.	Likelihood of occurrence 9 36 79 265 407 429 0 1 2 3 4 5	3.887	Likelihood of occurrence 1 11 23 76 160 161 0 1 2 3 4 5	4.005	Likelihood of occurrence 1 7 24 101 132 164 0 1 2 3 4 5	3.977	Likelihood of occurrence 7 18 32 88 115 104 0 1 2 3 4 5	3.643
	Impact on Education 18 54 97 302 372 353 0 1 2 3 4 5	3.685	Impact on Education 2 22 37 95 150 117 0 1 2 3 4 5	3.702	Impact on Education 5 13 29 125 119 124 0 1 2 3 4 5	3.716	Impact on Education 11 19 31 82 103 112 0 1 2 3 4 5	3.628
12. Operation round the clock, 7 days a week, will be more common in manufacturing, retail & service industries.	Likelihood of occurrence 78 202 262 314 237 118 0 1 2 3 4 5	2.647	Likelihood of occurrence 24 78 102 107 82 34 0 1 2 3 4 5	2.578	Likelihood of occurrence 21 70 87 106 84 55 0 1 2 3 4 5	2.773	Likelihood of occurrence 33 54 73 101 71 29 0 1 2 3 4 5	2.582
	Impact on Education 146 230 229 300 168 97 0 1 2 3 4 5	2.346	Impact on Education 49 100 82 96 54 29 0 1 2 3 4 5	2.227	Impact on Education 40 72 80 107 62 46 0 1 2 3 4 5	2.533	Impact on Education 57 58 67 97 52 22 0 1 2 3 4 5	2.269
13. Shortages of various inputs will appear, often with little advance notice.	Likelihood of occurrence 5 48 108 268 470 308 0 1 2 3 4 5	3.718	Likelihood of occurrence - 14 40 88 182 104 0 1 2 3 4 5	3.752	Likelihood of occurrence 1 11 28 95 171 120 0 1 2 3 4 5	3.840	Likelihood of occurrence 4 23 40 85 117 84 0 1 2 3 4 5	3.530
	Impact on Education 24 50 112 337 391 254 0 1 2 3 4 5	3.527	Impact on Education 7 16 44 128 152 68 0 1 2 3 4 5	3.460	Impact on Education 4 11 29 115 149 97 0 1 2 3 4 5	3.691	Impact on Education 13 23 39 94 90 89 0 1 2 3 4 5	3.414
14. A higher proportion of the total labor force will be employed in pollution control & environmental.	Likelihood of occurrence 6 39 162 471 372 146 0 1 2 3 4 5	3.339	Likelihood of occurrence 2 17 61 188 118 46 0 1 2 3 4 5	3.252	Likelihood of occurrence 3 13 55 160 145 48 0 1 2 3 4 5	3.356	Likelihood of occurrence 1 9 46 123 109 52 0 1 2 3 4 5	3.429
	Impact on Education 51 122 224 440 233 90 0 1 2 3 4 5	2.821	Impact on Education 22 54 84 152 84 26 0 1 2 3 4 5	2.711	Impact on Education 11 33 67 171 88 37 0 1 2 3 4 5	2.990	Impact on Education 18 35 73 117 61 27 0 1 2 3 4 5	2.752
15. A smaller proportion of the work force will be needed in goods producing industries, larger in service industries.	Likelihood of occurrence 25 68 161 461 321 136 0 1 2 3 4 5	3.189	Likelihood of occurrence 8 26 48 152 140 53 0 1 2 3 4 5	3.286	Likelihood of occurrence 6 21 47 170 122 52 0 1 2 3 4 5	3.285	Likelihood of occurrence 11 21 66 139 59 31 0 1 2 3 4 5	2.939
	Impact on Education 66 110 185 422 254 92 0 1 2 3 4 5	2.854	Impact on Education 23 42 61 140 116 29 0 1 2 3 4 5	2.903	Impact on Education 9 26 59 170 93 40 0 1 2 3 4 5	3.088	Impact on Education 34 42 65 112 45 23 0 1 2 3 4 5	2.502

FUTURE ITEMS IN THE ORDER THEY APPEARED ON THE QUESTIONNAIRES.	DISTRICT SUMMARY FREQUENCY	DIST. SUMM. MEAN $\bar{X}$	COMMUNITY FREQUENCY	COMM. MEAN $\bar{X}$	STAFF FREQUENCY	STAFF MEAN $\bar{X}$	STUDENT FREQUENCY	STUDENT MEAN $\bar{X}$
16. There will be more jobs for technicians than there are today.	Likelihood of occurrence 6 29 74 297 500 287 0 1 2 3 4 5	3.775	Likelihood of occurrence 2 1 13 107 196 111 0 1 2 3 4 5	3.923	Likelihood of occurrence — 10 28 100 195 86 0 1 2 3 4 5	3.761	Likelihood of occurrence 4 18 33 90 109 90 0 1 2 3 4 5	3.605
	Impact on Education 44 53 104 303 417 233 0 1 2 3 4 5	3.469	Impact on Education 9 13 22 101 178 92 0 1 2 3 4 5	3.692	Impact on Education 4 13 34 113 163 76 0 1 2 3 4 5	3.603	Impact on Education 31 27 48 89 76 65 0 1 2 3 4 5	3.033
17. More job descriptions will require people w/human skills, i.e. openness, compassion, warmth, & tolerance.	Likelihood of occurrence 35 85 190 425 287 168 0 1 2 3 4 5	3.133	Likelihood of occurrence 10 32 62 166 102 60 0 1 2 3 4 5	3.153	Likelihood of occurrence 6 22 56 150 115 72 0 1 2 3 4 5	3.335	Likelihood of occurrence 19 31 72 109 70 36 0 1 2 3 4 5	2.855
	Impact on Education 71 97 145 384 270 167 0 1 2 3 4 5	3.046	Impact on Education 21 40 55 143 104 47 0 1 2 3 4 5	3.000	Impact on Education 12 18 35 137 117 77 0 1 2 3 4 5	3.414	Impact on Education 38 39 55 104 49 43 0 1 2 3 4 5	2.659
18. Certification by demonstration of skills rather than by diploma, degree, or completion of training will be in use.	Likelihood of occurrence 42 112 245 365 293 110 0 1 2 3 4 5	2.930	Likelihood of occurrence 15 46 107 113 115 34 0 1 2 3 4 5	2.858	Likelihood of occurrence 11 35 79 142 108 42 0 1 2 3 4 5	3.024	Likelihood of occurrence 16 31 59 110 70 34 0 1 2 3 4 5	2.903
	Impact on Education 47 85 146 317 293 230 0 1 2 3 4 5	3.265	Impact on Education 11 41 65 109 106 74 0 1 2 3 4 5	3.182	Impact on Education 16 16 44 121 108 87 0 1 2 3 4 5	3.403	Impact on Education 20 28 37 87 79 69 0 1 2 3 4 5	3.200
19. A shorter work week & more leisure time will be the rule for most workers.	Likelihood of occurrence 46 74 173 321 411 177 0 1 2 3 4 5	3.255	Likelihood of occurrence 3 20 49 120 172 68 0 1 2 3 4 5	3.486	Likelihood of occurrence 2 15 43 107 183 72 0 1 2 3 4 5	3.588	Likelihood of occurrence 41 39 81 94 56 37 0 1 2 3 4 5	2.563
	Impact on Education 70 108 155 339 329 157 0 1 2 3 4 5	3.054	Impact on Education 16 40 47 138 133 44 0 1 2 3 4 5	3.110	Impact on Education 8 24 47 123 127 70 0 1 2 3 4 5	3.371	Impact on Education 46 44 61 78 69 43 0 1 2 3 4 5	2.613
20. Compulsory retirement at a set age will be enforced regardless of health, ability or desire of worker.	Likelihood of occurrence 126 248 302 268 173 61 0 1 2 3 4 5	2.252	Likelihood of occurrence 54 113 119 87 45 13 0 1 2 3 4 5	1.988	Likelihood of occurrence 40 94 107 92 70 15 0 1 2 3 4 5	2.246	Likelihood of occurrence 32 41 76 89 58 33 0 1 2 3 4 5	2.605
	Impact on Education 208 223 234 286 113 56 0 1 2 3 4 5	2.037	Impact on Education 85 97 89 85 38 13 0 1 2 3 4 5	1.835	Impact on Education 50 78 80 113 49 20 0 1 2 3 4 5	2.238	Impact on Education 73 48 65 88 26 23 0 1 2 3 4 5	2.046

FUTURE ITEMS IN THE ORDER THEY APPEARED ON THE QUESTIONNAIRES.	DISTRICT SUMMARY FREQUENCY	DIST. SUMM. MEAN $\bar{X}$	COMMUNITY FREQUENCY	COMM. MEAN $\bar{X}$	STAFF FREQUENCY	STAFF MEAN $\bar{X}$	STUDENT FREQUENCY	STUDENT MEAN $\bar{X}$
21. People will need to be more self-motivated & self-directed than they are presently.	Likelihood of occurrence 16 66 137 406 343 201 0 1 2 3 4 5	3.368	Likelihood of occurrence 6 26 46 135 133 78 0 1 2 3 4 5	3.408	Likelihood of occurrence 5 26 44 164 108 68 0 1 2 3 4 5	3.320	Likelihood of occurrence 5 14 47 107 102 55 0 1 2 3 4 5	3.378
	Impact on Education 42 60 126 378 322 204 0 1 2 3 4 5	3.316	Impact on Education 13 26 41 122 125 86 0 1 2 3 4 5	3.400	Impact on Education 9 10 35 160 112 65 0 1 2 3 4 5	3.409	Impact on Educaiton 20 24 50 96 85 51 0 1 2 3 4 5	3.101
22. Sexual relationships of varied types will be openly accepted.	Likelihood of occurrence 35 82 160 366 346 201 0 1 2 3 4 5	3.272	Likelihood of occurrence 9 36 60 166 114 46 0 1 2 3 4 5	3.109	Likelihood of occurrence 7 17 51 131 137 77 0 1 2 3 4 5	3.440	Likelihood of occurrence 19 29 49 69 95 78 0 1 2 3 4 5	3.271
	Impact on Education 74 133 178 361 243 154 0 1 2 3 4 5	2.899	Impact on Education 19 52 78 150 72 43 0 1 2 3 4 5	2.804	Impact on Education 11 43 56 133 109 45 0 1 2 3 4 5	3.060	Impact on Education 44 38 44 78 62 66 0 1 2 3 4 5	2.825
23. Child-care centers will be much more numerous than at present & will provide developmental & educational components for children.	Likelihood of occurrence 8 25 65 237 501 348 0 1 2 3 4 5	3.894	Likelihood of occurrence 2 4 22 82 192 130 0 1 2 3 4 5	3.963	Likelihood of occurrence 2 6 13 71 106 146 0 1 2 3 4 5	4.054	Likelihood of occurrence 4 15 30 84 123 72 0 1 2 3 4 5	3.595
	Impact on Education 22 33 99 292 403 303 0 1 2 3 4 5	3.675	Impact on Education 4 10 29 112 162 103 0 1 2 3 4 5	3.731	Impact on Education 5 6 25 93 137 141 0 1 2 3 4 5	3.902	Impact on Education 13 17 45 87 104 59 0 1 2 3 4 5	3.320
24. Many couples will divide bread-winning, household, & child care duties on grounds other than sex.	Likelihood of occurrence 13 21 64 238 458 391 0 1 2 3 4 5	3.924	Likelihood of occurrence 1 6 24 86 178 136 0 1 2 3 4 5	3.954	Likelihood of occurence — 1 12 80 170 162 0 1 2 3 4 5	4.129	Likelihood of occurrence 12 14 28 72 110 93 0 1 2 3 4 5	3.620
	Impact on Education 56 96 171 314 282 211 0 1 2 3 4 5	3.156	Impact on Education 15 33 57 124 113 69 0 1 2 3 4 5	3.202	Impact on Education 7 21 47 119 103 103 0 1 2 3 4 5	3.497	Impact on Education 34 42 67 71 66 39 0 1 2 3 4 5	2.669
25. It will be possible to achieve chemical control of many undesirable negative, primitive, & aggressive behavioral tendencies in man.	Likelihood of occurrence 62 147 236 341 245 107 0 1 2 3 4 5	2.774	Likelihood of occurrence 26 61 100 112 87 38 0 1 2 3 4 5	2.677	Likelihood of occurrence 19 60 71 125 95 46 0 1 2 3 4 5	2.853	Likelihood of occurrence 17 26 65 104 63 23 0 1 2 3 4 5	2.802
	Impact on Education 111 157 219 304 167 109 0 1 2 3 4 5	2.549	Impact on Education 45 68 92 92 64 31 0 1 2 3 4 5	2.395	Impact on Education 33 53 65 124 58 49 0 1 2 3 4 5	2.702	Impact on Education 33 36 62 88 45 29 0 1 2 3 4 5	2.556

FUTURE ITEMS IN THE ORDER THEY APPEARED ON THE QUESTIONNAIRE.	DISTRICT SUMMARY FREQUENCY	DIST. SUMM. MEAN $\bar{X}$	COMMUNITY FREQUENCY	COMM. MEAN $\bar{X}$	STAFF FREQUENCY	STAFF MEAN $\bar{X}$	STUDENT FREQUENCY	STUDENT MEAN $\bar{X}$
26. There will be schools of many sorts with widely varying methods & organizational styles.	Likelihood of occurrence 33 97 203 362 322 152 0 1 2 3 4 5	3.111	Likelihood of occurrence 7 31 95 133 123 41 0 1 2 3 4 5	3.063	Likelihood of occurrence 12 38 81 141 104 46 0 1 2 3 4 5	3.007	Likelihood of occurrence 14 28 27 88 95 65 0 1 2 3 4 5	3.315
	Impact on Education 29 72 118 233 301 375 0 1 2 3 4 5	3.622	Impact on Education 8 26 48 74 131 127 0 1 2 3 4 5	3.630	Impact on Education 9 27 43 114 88 118 0 1 2 3 4 5	3.501	Impact on Education 12 19 27 45 82 130 0 1 2 3 4 5	3.765
27. Modes of teaching & learning will be more flexible utilizing computer-assisted, multi-sensory & yet-to-be-developed forms of instruction.	Likelihood of occurrence 7 46 102 294 435 252 0 1 2 3 4 5	3.637	Likelihood of occurrence 1 12 30 95 178 115 0 1 2 3 4 5	3.814	Likelihood of occurrence 1 21 46 113 160 80 0 1 2 3 4 5	3.544	Likelihood of occurrence 5 13 26 86 97 57 0 1 2 3 4 5	3.507
	Impact on Education 15 38 68 225 374 372 0 1 2 3 4 5	3.851	Impact on Education 2 7 17 63 161 162 0 1 2 3 4 5	4.086	Impact on Education 2 18 24 100 129 120 0 1 2 3 4 5	3.771	Impact on Education 11 13 27 62 78 90 0 1 2 3 4 5	3.612
28. Futuristic studies will be part of the curriculum.	Likelihood of occurrence 12 53 151 387 361 150 0 1 2 3 4 5	3.330	Likelihood of occurrence 5 23 49 153 130 59 0 1 2 3 4 5	3.329	Likelihood of occurrence 1 16 61 145 134 52 0 1 2 3 4 5	3.347	Likelihood of occurrence 6 14 41 89 97 39 0 1 2 3 4 5	3.308
	Impact on Education 24 50 128 357 312 195 0 1 2 3 4 5	3.377	Impact on Education 5 24 48 131 130 65 0 1 2 3 4 5	3.370	Impact on Education 3 11 47 151 108 65 0 1 2 3 4 5	3.416	Impact on Education 16 15 33 75 74 65 0 1 2 3 4 5	3.335
29. Career education & work experience will be available for all students at some time during public school experience.	Likelihood of occurrence 6 21 55 237 469 348 0 1 2 3 4 5	3.924	Likelihood of occurrence 2 5 24 87 187 126 0 1 2 3 4 5	3.926	Likelihood of occurrence — 5 15 76 176 143 0 1 2 3 4 5	4.053	Likelihood of occurrence 4 11 16 74 106 79 0 1 2 3 4 5	3.738
	Impact on Education 10 15 58 226 398 400 0 1 2 3 4 5	3.976	Impact on Education 3 2 20 83 171 140 0 1 2 3 4 5	3.998	Impact on Education — 3 13 84 146 155 0 1 2 3 4 5	4.090	Impact on Education 7 10 25 59 81 105 0 1 2 3 4 5	3.784
30. Computer simulation, games, etc. will permit the students to practice career & management activities in order to help choose adult role.	Likelihood of occurrence 11 36 112 322 430 221 0 1 2 3 4 5	3.579	Likelihood of occurrence 3 13 36 121 104 86 0 1 2 3 4 5	3.626	Likelihood of occurrence 4 12 37 137 155 71 0 1 2 3 4 5	3.538	Likelihood of occurrence 4 11 39 64 111 64 0 1 2 3 4 5	3.567
	Impact on Education 16 29 84 320 386 252 0 1 2 3 4 5	3.644	Impact on Education 4 10 29 121 150 95 0 1 2 3 4 5	3.682	Impact on Education 5 9 24 138 139 78 0 1 2 3 4 5	3.606	Impact on Education 7 10 31 61 97 79 0 1 2 3 4 5	3.642

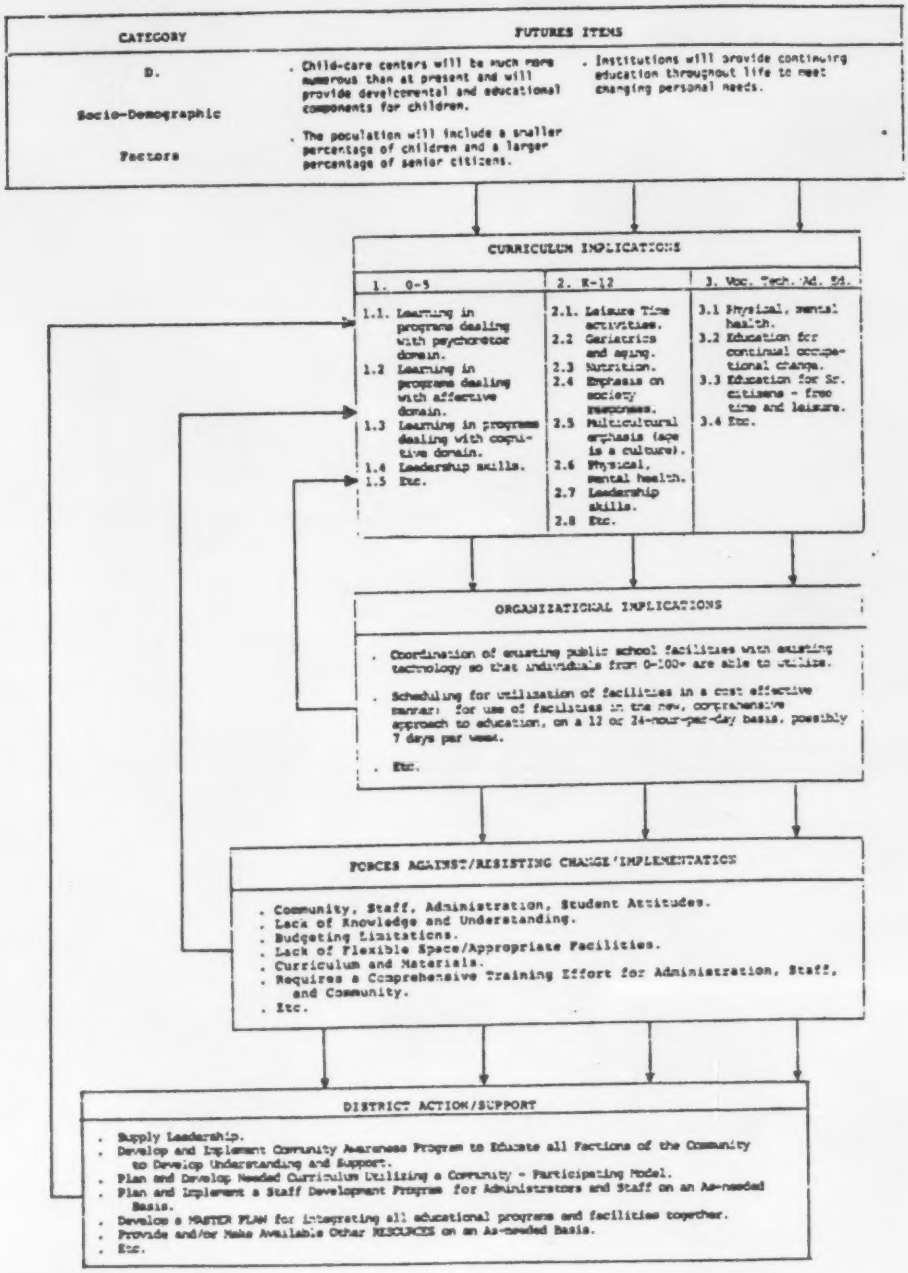
FUTURE ITEMS IN THE ORDER THEY APPEARED ON THE QUESTIONNAIRE.	DISTRICT SUMMARY FREQUENCY	DIST. SUMM. MEAN $\bar{X}$	COMMUNITY FREQUENCY	COMM. MEAN $\bar{X}$	STAFF FREQUENCY	STAFF MEAN $\bar{X}$	STUDENT FREQUENCY	STUDENT MEAN $\bar{X}$
31. Institutions will provide continuing education throughout life to meet changing personal & occupational needs.	Likelihood of occurrence 3 24 57 283 411 353 0 1 2 3 4 5	3.887	Likelihood of occurrence — 6 12 90 166 156 0 1 2 3 4 5	4.056	Likelihood of occurrence 2 5 17 83 168 143 0 1 2 3 4 5	4.007	Likelihood of occurrence 1 13 28 110 77 54 0 1 2 3 4 5	3.452
	Impact on Education 14 33 81 281 357 328 0 1 2 3 4 5	3.753	Impact on Education 2 10 21 99 154 136 0 1 2 3 4 5	3.898	Impact on Education 2 9 15 105 133 131 0 1 2 3 4 5	3.901	Impact on Education 10 14 45 77 70 61 0 1 2 3 4 5	3.321
32. Rapid changes in technology will cause many people to frequently retrain & change occupations.	Likelihood of occurrence 10 112 111 329 390 242 0 1 2 3 4 5	3.577	Likelihood of occurrence 1 11 40 139 149 87 0 1 2 3 4 5	3.604	Likelihood of occurrence 2 6 23 117 159 111 0 1 2 3 4 5	3.813	Likelihood of occurrence 7 25 48 73 82 44 0 1 2 3 4 5	3.183
	Impact on Education 25 44 110 342 316 248 0 1 2 3 4 5	3.497	Impact on Education 10 17 33 147 111 98 0 1 2 3 4 5	3.505	Impact on Education 3 9 25 118 135 103 0 1 2 3 4 5	3.735	Impact on Education 12 18 52 77 70 47 0 1 2 3 4 5	3.145
33. Early childhood ed will be provided by the public schools for most children beginning at age 3 or 4.	Likelihood of occurrence 30 86 204 284 313 210 0 1 2 3 4 5	3.237	Likelihood of occurrence 14 32 92 108 111 72 0 1 2 3 4 5	3.133	Likelihood of occurrence 6 39 75 108 111 79 0 1 2 3 4 5	3.234	Likelihood of occurrence 10 15 37 68 91 59 0 1 2 3 4 5	3.400
	Impact on Education 40 78 116 246 291 306 0 1 2 3 4 5	3.474	Impact on Education 19 27 44 100 116 109 0 1 2 3 4 5	3.431	Impact on Education 9 34 49 85 99 113 0 1 2 3 4 5	3.465	Impact on Education 12 17 23 61 76 84 0 1 2 3 4 5	3.553
34. The school curriculum will include instruction in skills for coping with a complex society.	Likelihood of occurrence 7 30 96 379 397 210 0 1 2 3 4 5	3.574	Likelihood of occurrence 3 9 30 142 160 84 0 1 2 3 4 5	3.633	Likelihood of occurrence 1 8 33 130 161 80 0 1 2 3 4 5	3.651	Likelihood of occurrence 3 13 33 107 76 46 0 1 2 3 4 5	3.369
	Impact on Education 15 34 92 322 352 260 0 1 2 3 4 5	3.620	Impact on Education 4 13 31 135 135 95 0 1 2 3 4 5	3.620	Impact on Education 2 5 26 105 147 105 0 1 2 3 4 5	3.808	Impact on Education 9 16 35 82 70 60 0 1 2 3 4 5	3.353
35. Ability to read will be less important as a tool for gaining information.	Likelihood of occurrence 349 246 204 181 108 47 0 1 2 3 4 5	1.642	Likelihood of occurrence 182 87 68 51 30 12 0 1 2 3 4 5	1.293	Likelihood of occurrence 96 104 85 70 43 18 0 1 2 3 4 5	1.793	Likelihood of occurrence 71 55 51 60 35 17 0 1 2 3 4 5	1.945
	Impact on Education 177 132 118 184 180 241 0 1 2 3 4 5	2.757	Impact on Education 86 49 41 53 65 96 0 1 2 3 4 5	2.641	Impact on Education 49 53 50 81 56 74 0 1 2 3 4 5	2.727	Impact on Education 42 30 27 50 59 71 0 1 2 3 4 5	2.957

FUTURE ITEMS IN THE ORDER THEY APPEARED ON THE QUESTIONNAIRE.	DISTRICT SUMMARY FREQUENCY	DIST. SUMM. MEAN $\bar{X}$	COMMUNITY FREQUENCY	COMM. MEAN $\bar{X}$	STAFF FREQUENCY	STAFF MEAN $\bar{X}$	STUDENT FREQUENCY	STUDENT MEAN $\bar{X}$
36. Education in languages, world trade, & world history will be in more demand by students.	Likelihood of occurrence 22 43 117 375 347 228 0 1 2 3 4 5	3.472	Likelihood of occurrence 3 17 29 131 162 90 0 1 2 3 4 5	3.625	Likelihood of occurrence 5 15 63 162 110 63 0 1 2 3 4 5	3.306	Likelihood of occurrence 14 11 25 82 75 75 0 1 2 3 4 5	3.482
	Impact on Education 18 50 92 303 334 290 0 1 2 3 4 5	3.615	Impact on Education 3 17 30 123 136 116 0 1 2 3 4 5	3.695	Impact on Education 3 15 44 128 115 82 0 1 2 3 4 5	3.506	Impact on Education 12 18 18 52 83 92 0 1 2 3 4 5	3.644
37. Learning opportunities for students will be provided throughout the community by business & social agencies, with the school serving to structure & coordinate the students' education.	Likelihood of occurrence 13 71 156 412 314 147 0 1 2 3 4 5	3.247	Likelihood of occurrence 5 27 68 158 117 53 0 1 2 3 4 5	3.201	Likelihood of occurrence 5 26 64 153 124 42 0 1 2 3 4 5	3.186	Likelihood of occurrence 3 18 24 101 73 52 0 1 2 3 4 5	3.412
	Impact on Education 24 48 114 342 315 223 0 1 2 3 4 5	3.452	Impact on Education 11 15 42 146 128 77 0 1 2 3 4 5	3.422	Impact on Education 5 18 41 122 124 74 0 1 2 3 4 5	3.469	Impact on Education 8 15 31 74 63 72 0 1 2 3 4 5	3.473

APPENDIX F

MODEL FOR REALIZING DESIRED PROBABLE FUTURES: ILLUSTRATED WITH CATEGORY D FUTURES

Figure II: MODEL FOR REALIZING DESIRED PROBABLE FUTURES: ILLUSTRATED WITH CATEGORY D.


CATEGORY
FUTURES ITEMS
D.
Socio-Demographic
Factors
. Child-care centers will be much more numerous than at present and will provide developmental and educational components for children.
. The population will include a smaller percentage of children and a larger percentage of senior citizens.
. Institutions will provide continuing education throughout life to meet changing personal needs.
CURRICULUM IMPLICATIONS
1. 0-5
1.1. Learning in programs dealing with psychomotor domain.
1.2 Learning in programs dealing with affective domain.
1.3 Learning in programs dealing with cognitive domain.
1.4 Leadership skills.
1.5 Etc.
2. K-12
2.1. Leisure Time activities.
2.2 Geriatrics and aging.
2.3 Nutrition.
2.4 Emphasis on society responses.
2.5 Multicultural emphasis (age is a culture).
2.6 Physical, mental health.
2.7 Leadership skills.
2.8 Etc.
3. Voc. Tech./Ad. Ed.
3.1 Physical, mental health.
3.2 Education for continual occupational change.
3.3 Education for Sr. citizens - free time and leisure.
3.4 Etc.
ORGANIZATIONAL IMPLICATIONS
. Coordination of existing public school facilities with existing technology so that individuals from 0-100+ are able to utilize.
. Scheduling for utilization of facilities in a cost effective manner: for use of facilities in the new, comprehensive approach to education, on a 12 or 24-hour-per-day basis, possibly 7 days per week.
. Etc.
FORCES AGAINST/RESISTING CHANGE/IMPLEMENTATION
. Community, Staff, Administration, Student Attitudes.
. Lack of Knowledge and Understanding.
. Budgeting Limitations.
. Lack of Flexible Space/Appropriate Facilities.
. Curriculum and Materials.
. Requires a Comprehensive Training Effort for Administration, Staff, and Community.
. Etc.
DISTRICT ACTION/SUPPORT
. Supply Leadership.
. Develop and Implement Community Awareness Program to Educate all Factions of the Community to Develop Understanding and Support.
. Plan and Develop Needed Curriculum Utilizing a Community - Participating Model.
. Plan and Implement a Staff Development Program for Administrators and Staff on an As-needed Basis.
. Develop a MASTER PLAN for Integrating all educational programs and facilities together.
. Provide and/or Make Available Other RESOURCES on an As-needed Basis.
. Etc.